UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION II
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10278

DEC 28 1982

issued By RA
12/30/82
with changes as noted

Mr. Ira Wilder
Chief, Oil and Hazardous Materials
Spills Branch
Municipal Environmental
Research Laboratory-Ci
U.S. Environmental Protection Agency
Edison, New Jersey 08837

Dear Mr. Wilder:

This is in reference to the approval granted to the U.S. Environmental Protection Agency (EPA), Municipal Environmental Research Laboratory-Ci, Oil and Hazardous Materials Spills Branch (OHMSB) on July 6, 1982 to conduct a trial burn of its Mobile Incineration System for the disposal of polychlorinated biphenyls (PCBs) at its Edison, New Jersey facility.

Subsequent to your October 8, 1982 and November 10, 1982 memoranda and several meetings between our staffs, I determined that many modifications and additions to the July 6, 1982 approval conditions are necessary prior to the PCB trial burn. I am enclosing a recodified version of the approval conditions with the necessary modifications and additions.

Further assistance may be obtained from Catherine Massimino of my staff at FTS 264-0545.

Sincerely yours,

Jacqueline E. Schafer
Regional Administrator

Enclosure

cc: Mr. Robert E. Hughey
Commissioner, New Jersey Department of
Environmental Protection w/encls.

bcc: Mr. Frank Coolick
Bureau of Engineering Review and
Permits (Hazardous Waste)
New Jersey Department of
Environmental Protection w/encls.

Dick Dewling, 2DRA w/encls.
Conrad Simon, 2AWM w/encls.
Barbara Metzger, 2ESD w/encls.
Kenneth S. Stoller, 2AWM-DD w/encls.
Ernest A. Regna, 2AWM-SW w/encls.
Catherine Massimino, 2AWM-SW w/encls.
John N. Brogard, 2AWM-SW w/encls.
Marcus Kantz, 2ES-MM w/encls.
Jehuda Menczel, 2AWM-AF w/encls.
Morris Trichon, 2AWM-HW w/encls.

ATTACHMENT NO. 1

Approval Conditions for PCB Trial Burns
EPA Mobile Incineration System
Edison, New Jersey

1. For purposes of this trial burn approval any change to the mobile incinerator system's capacity, design, efficiency, and waste type, or to the mobile incinerator control monitoring system's design and accuracy, or to other information as provided in the trial burn plan which would affect the applicant's ability to comply with the applicable regulations or trial burn approval Condition Nos. 2-17 below will require EPA Region II approval prior to implementing this change during the trial burn.

2. The applicant is authorized to conduct trial burns of polychlorinated biphenyls (PCBs) at intermittent times over the duration of three months.

3. Extension of the 3-month period designated in Condition No. 2 may be granted provided the applicant requests such extension in writing from the Regional Administrator (RA), EPA Region II, with adequate justification. The applicant must receive the RA's written approval prior to continuing the PCB trial burn beyond the 3-month period.

4. The commencement date for the 3-month period shall be specified by the applicant in writing to EPA Region II, the State of New Jersey, the County of Middlesex and the Township of Edison at least 30 days prior to commencing the burning of PCBs.

5. No more PCB feed material will be introduced into the combustion chamber than is necessary to satisfactorily complete the 12 test runs and the decontamination of the system indicated in Attachment No. 2. PCBs will not be introduced into the combustion chamber until steady-state operating conditions exist within the incinerator.

6. The flow of PCBs to the incinerator shall stop automatically if:

   a. Oxygen concentration in the secondary combustion chamber (SCC) exhaust falls below three percent;

   b. There is any failure of the 10-minute cycle monitoring operations for oxygen, carbon monoxide and carbon dioxide concentrations in the SCC exhaust. For the purpose of this trial burn approval, monitoring operations shall be defined to include the analyzers and the transport lines.

   c. There is any failure of the equipment measuring temperature in the SCC.

   d. Combustion temperature in the SCC falls below 2060°F.

7. The applicant shall maintain continuous observation of the recorders for the temperature in the SCC, PCB feed rates and quantities, and oxygen, carbon monoxide, and carbon dioxide concentrations in the SCC. If there is any failure of these recorders, the flow of PCBs to the incinerator shall be stopped immediately.

8. If the automatic cut-off system is activated due to an upset condition as per Condition No. 6 above, testing shall be suspended until an oral report is made, the problems causing the upset have been resolved, and the Director, Environmental Services Division, EPA Region II has approved continuation of the trial burn orally or in writing. If Director ESD Not Avail, then Chief S&M Branch
DD-ESD, Chief Air Monitoring Section of S&M Branch

9. The applicant shall comply with Item Nos. 3, 6, 7 and 10 of the May 12, 1982, memorandum (Attachment No. 3) from Ira Wilder (OHMSB), MERL-Ci, to Richard T. Dewling, Deputy Regional Administrator (DRA), EPA Region II.

10. The applicant shall comply with Item Nos. 1, 2 and 4 of June 11, 1982 memorandum (Attachment No. 4) from Ira Wilder (OHMSB), MERL-Ci, to Richard T. Dewling, DRA, EPA Region II.

11. The applicant shall comply with Item No. 2 of the September 17, 1982, memorandum (Attachment No. 5) from Ira Wilder (OHMSB), MERL-Ci to Jacqueline E. Schafer, RA, Region II.

12. The applicant shall be allowed during the trial burn to alternate from one test run to the next the use of steam and air as atomizing media for the waste oil burner and cooling water nozzle to the kiln. If the applicant chooses to limit its use to only one atomizing medium, future use of the incinerator based on data generated by the trial burn may be limited to the demonstrated medium.

13. Split samples (identified in Attachment No. 6) will be required from the PCB trial burn. Portions of composite samples of feed oil, scrubber influent and effluent liquid, incinerator ash discharges, and stack gas extract as available, are to be provided, with all necessary chain of custody and identification forms, and forwarded to:

Mr. Francis T. Brezenski
Chief, Technical Support Branch
U.S. Environmental Protection Agency
Edison, New Jersey 08837

14. The calibration procedures to be followed for the oxygen, carbon monoxide, and carbon dioxide monitors during the trial burn are as follows:

a. Calibration gases must be introduced through the sampling system in the same manner as the introduction of the source gas;

erroneously omitted in final draft

b. A 4-point calibration will be performed each day prior to the introduction of PCB feed material. This calibration will use a zero gas, a gas at a concentration less than, one approximately equal to, and one greater than the expected concentration of the sampled gas;

c. A single-point calibration will be performed at the conclusion of each sampling run. The concentration of this calibration gas will be close to the concentration of the actual gas sample component;

d. An additional 4-point calibration will be performed if any of the following situations arise:

i. Calibration check difference(1) exceeds 20 percent for oxygen or carbon dioxide;

ii. Calibration check difference(1) exceeds the greater of either 10 parts per million (ppm) or 20 percent for carbon monoxide.

15. a. The PCB feed will be shut off during the first single-point calibration of the oxygen, carbon monoxide, and carbon dioxide monitors performed between two test runs on the same day.

Within 24 hours of performance of the first single-point calibration, the applicant will be authorized by oral permission of the Director, Environmental Services Division, EPA Region II, to continue the remainder of the PCB trial burn in one of the following manners:

i. The applicant will shut off the PCB feed material when a single-point calibration of the oxygen, carbon monoxide, and carbon dioxide is performed.

ii. The applicant will not be required to shut off the PCB feed material when a single-point calibration of the oxygen, carbon monoxide, and carbon dioxide monitor is performed unless the single-point calibration will require greater than 60 minutes to complete.

b. During performance of all 4-point calibrations of the oxygen, carbon monoxide, and carbon dioxide monitors, the PCB feed material will be shut off.

(1) Calibration check difference refers to the difference between the concentration indicated by two consecutive checks using the same calibration gas, whether the calibration checks are single-point or 4-point.

16. Acceptance criteria for actual sample run data collected between two consecutive calibration checks for oxygen and carbon dioxide, based on the calibration check differences, will be as follows:

    a. If calibration check differences are five percent or less, the test run conducted prior to the check will be considered valid;

    b. If calibration check differences are greater than five percent but not greater than 20 percent, the prior test run will be considered valid but must be corrected for the worst case difference;

    c. If calibration check differences are greater than 20 percent, the prior test run will be considered invalid.

17. Acceptance criteria for actual sample run data collected between two consecutive calibration checks for carbon monoxide, based on the calibration check difference, will be as follows:

    a. If calibration check difference does not exceed the greater of five ppm or five percent, the prior test run will be considered valid;

    b. If calibration check difference exceeds the greater of five ppm or five percent but does not exceed the greater of 10 ppm or 20 percent, the prior test run will be considered valid, but must be corrected for the worst case difference;

    c. If calibration check difference exceeds the greater of 10 ppm or 20 percent, the data will be considered invalid.

18. The EPA Region II on-scene monitor, designated by the Director, Environmental Services Division, will have the ultimate authority for termination of the PCB feed upon his or her determination of a system malfunction or violation of the conditions of this trial burn approval.

19. All written reports shall be sent to:

    ~~Kenneth S. Stoller~~ Conrad Simon
    ~~Deputy~~ Director
    Air and Waste Management Division
    U.S. Environmental Protection Agency
    26 Federal Plaza
    New York, New York 10278

    All oral reports shall be made to the EPA Region II on-scene observer, or if not available to: Director ESD or person designated in Condition

    Fred Rubel
    Chief, Emergency Response and
    Hazardous Materials Inspection Branch
    U.S. Environmental Protection Agency
    Edison, New Jersey 08837
    (201) 548-8730

ATTACHMENT NO. 2

PROGRAM

PHASE III OF TRIAL BURN

Program	Normal Feed	Test Runs	
		NJDEP(1) Particulate	DRE(2)
Start up, test system and components, bring to equilibrium	Fuel Oil(3)		
DRE, HCl removal, particulate, NJDEP particulate, RCl(4)	10% PCB 90% Fuel Oil	3	3
DRE, HCl removal, particulate, NJDEP particulate, RCl	40% PCB 60% Fuel Oil	3	3
Decontaminate and shut down system	Fuel Oil Rinse		

(1) New Jersey Department of Environmental Protection

(2) Destruction and removal efficiency

(3) Orthodichlorobenzene may be fed into the system for a short time period to re-adjust the air pollution control components.

(4) Chlorinated organic compounds

Attachment No. 3

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: May 12, 1982

SUBJECT: U.S. EPA Mobile Incineration System: Trial Burn Plan

FROM: Ira Wilder, Chief
Oil & Hazardous Materials Spills Branch, MERL-Ci, Edison, NJ 08837

TO: Richard T. Dewling, Ph.D.
Deputy Regional Administrator, Region II

In regard to your May 5, 1982 memo, I am attaching our responses to the technical questions raised by your staff on the Trial Burn Plan for the Mobile Incineration System.

Some of the items on the attached list warrant further discussion between our respective technical staffs. I will ensure that a meeting is set up to resolve these minor technical differences.

Please let me know if you require any further information.

Attachments

cc: K. Stoller, Region II, 2AWM

Responses to Technical Questions

Re: Memo of May 5, 1982 from Dewling to Wilder

1. Please refer to Section V, pages 33 and 34, of the Trial Burn Plan, Supplement 1, February 26, 1982 for a detailed description of the incinerator stack. It should be noted that the discharge section of the stack is a 24" x 24" square and 100" long. This section is placed above the sound attenuation section (silencer) of the stack. All gas sampling ports are located on the discharge section of the stack at the following locations:

a.	Continuous stack monitoring for O_2, CO_2, CO, SO_2, NO_x, and total hydrocarbons	24 inches downstream from silencer 76 inches upstream of stack exhaust
b.	Modified Method 5 for organics and particulate matter	72 inches downstream from silencer 28 inches upstream of stack exhaust

2. The current stack geometry requires a four-point traverse at each of the five sample ports, or twenty points in all. The Trial Burn Plan calls for a four-hour (240-minute) sampling period which allows for twelve minutes of sampling at each of the twenty sample points.

3. In accordance with standard operating procedures and EPA sampling protocol, a determination of cyclonic flow in the stack gas stream will be made prior to the collection of gas samples.

4. In the design of the proposed sampling train, organic compounds are trapped in the XAD-2 resin; only aqueous condensate passes through the resin and is collected in the first impinger. Whether a second impinger is needed requires further discussion.

5. The incorporation of an additional XAD-2 resin module could result in an excessive pressure drop through the sampling train, thus preventing isokinetic sampling. This item requires further discussion.

6. The standard operating procedure (SOP) for the sampling/analytical subcontractor, A.D. Little, is to perform a methylene chloride rinse followed by a hexane rinse. The subcontractor has been requested to modify this SOP to incorporate the procedure recommended--an acetone rinse followed by a methylene chloride rinse.

7. The rinsing of all glassware, up to the caustic impinger, is a standard laboratory procedure and will be followed during the trial burn.

8. The subcontractor has been instructed to place a thermocouple in the gas stream prior to the resin module to ensure a gas temperature of 20°C.

9. Discussions are underway with the manufacturer of the stack monitoring system to modify the current calibration procedure to incorporate a three-point calibration procedure. In addition to the enhanced automatic calibration procedure, a supply of additional calibration gases will be available to verify the performance of the monitoring instrument. This will result in equipment modification and a modification to the computer program.

10. As described in the QA/QC section of the Trial Burn Plan, all instruments will be calibrated in accordance with EPA protocol. Calibration data and dates will be included in the record-keeping performed for the trial burn.

In response to part B, "Rule Requirement Conformance," of your letter, the requirements of 40 CFR 761.42(C)(7)(ii) were addressed on page 12 of the "Statement of Compliance with TSCA" section of the "Initial Report for Destruction of Polychlorinated Biphenyls in a Mobile Incineration System at EPA Region II Facility, Edison, New Jersey," dated September 18, 1981.

Earlier discussions with personnel in Region II's Emergency Response and Hazardous Materials Inspection Branch have established that the incineration system and all logistical support equipment would not be subject to the requirements of 40 CFR 761.42(C)(7)(ii) and/or 40 CFR Part 112.

It is our understanding that we are not required by either of the above regulations to have an SPCC plan. However, an in-house spill prevention, control, and countermeasure plan was prepared and is addressed in Section VIII, Part E, page 25, of the "system description" section of the aforementioned "Initial Report" that was submitted to you. A copy of the in-house SPCC (which does address the waste feed tank and all transfer lines), along with the "Emergency Contingency Plan," will be sent to Catherine Massimino per your instructions.

UNITED ... ES ENVIRONMENTAL PROTECT ... GENCY

DATE: June 11, 1982

SUBJECT: U.S. EPA Mobile Incineration System: Trial Burn Plan

FROM: Ira Wilder, Chief
Oil & Hazardous Materials Spills Branch, MERL-Ci, Edison, NJ 08837

TO: Richard T. Dewling, Ph.D.
Deputy Regional Administrator, Region II

My May 12, 1982 memo to you identified three technical questions, regarding sampling and analytical procedures during the trial burn, that had to be resolved by our technical staffs. The three questions--Items 4, 5, and 9 in the memo--were the topic of a meeting on June 1, 1982 between Messrs. Marcus Kantz and Larry Bernson of your staff, James Yezzi of OHMS Branch, and Richard Miller of IT Corporation. As a result of this meeting and numerous subsequent conversations between our staffs, I am proposing the following modifications to the Trial Burn Plan.

1. A second dry impinger will be added to the Modified Method 5 (MM5) gas sampling train between the first dry impinger and the caustic impinger. The second dry impinger will collect any possible condensate carry-over from the first impinger (Item 4).

2. A second sorbent trap, containing XAD-2 resin for the collection of organic vapors, will be installed on the MM5 sampling train. This sorbent trap will be positioned between the second and third impingers, after the dry impingers but before the caustic impingers. The function of this trap is to collect any organics that are not collected on the first sorbent trap or in the condensate in impingers one and two (Item 5).

3. The following calibration procedures will be used for the continuous emission monitors (Item 9):

   A. A three-point calibration will be performed prior to the beginning of the three major test periods. This calibration will use a zero gas, a 70-90% span gas, and a span gas with concentration close to the expected concentration of the gas sample.

   B. A two-point calibration will be performed at the beginning and end of each of the nine planned tests. This calibration will utilize two selected span gases--the concentration of one span gas will be slightly lower than the expected concentration of the actual gas sample components, while the concentration of the second span gas will be slightly higher than the expected concentration of the gas sample. In summary, the calibration will utilize two span gases with concentrations close to, and "bracketing," the expected concentration of each gas sample component.

   C. A single-point calibration will be performed approximately every two hours during all testing. The concentration of this calibration gas will be close to the concentration of the actual gas sample component.

4. Two additional recommendations, described below, were made during the June 1 meeting. The recommendations have been considered and will be implemented; this will necessitate the following revisions to Items 2 and 8 that are described in my May 12th memo.

A. Item 2 is revised as follows:

The current stack geometry requires a six-point traverse at each of the five sample ports, or thirty points in all. The Trial Burn Plan calls for a four-hour (240-minute) sampling period which allows for eight minutes of sampling at each of the thirty sample ports.

B. Item 8 is revised as follows:

The subcontractor has been instructed to place a thermocouple in the gas stream prior to the resin module to ensure a gas temperature of less than 20°C.

Should you or members of your staff have any questions, please contact me (FTS-340-6635) or James J. Yezzi, Jr. of my staff (FTS-340-6703). I sincerely appreciate your cooperation in this matter.

cc: K. Stoller - Region II
M. Kantz - Region II
L. Bernson - Region II
J. Yezzi, Jr. - OHMSB
K. Honeycutt - IT Corporation
R. Miller - IT Corporation

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: September 17, 1982

SUBJECT: U.S. EPA Mobile Incineration System: Trial Burn Plan

FROM: Ira Wilder, Chief
Oil & Hazardous Materials Spills Branch, MERL-Ci, Edison, NJ 08837

TO: Jacqueline E. Schafer
Regional Administrator, Region II

In reference to your July 6, 1982 correspondence authorizing this office to conduct a PCB Trial Burn of the EPA Mobile Incineration System at the GSA Raritan Depot in Edison, NJ, I hereby request your approval of the following modifications:

1. Allowance for the incineration of additional Askarel (beyond the 16-hr time limit and the 100-lb weight limit) if a test must be repeated due to weather conditions or operational upsets.

2. Increase of the stack height an additional 10 feet. This results in a change of the gas sampling port locations. The new locations are:

   a. Continuous stack monitoring for O_2, CO_2, CO, SO_2, NO_x, and THC:

      24 inches downstream from straightening vanes,
      136 inches upstream of the stack exhaust.

   b. Modified Method 5 for organics and particulate matter:

      72 inches downstream from straightening vanes,
      88 inches upstream of stack exhaust.

Supporting data regarding the increase in the stack height will be provided to your technical staff under separate cover.

cc: Dr. Richard T. Dewling, DRA, EPA, Region II
Mr. Kenneth S. Stoller, AWM, EPA, Region II
Dr. Barbara Metzger, ES, EPA, Region II
Mr. Fred Rubel, ES-ER, EPA, Region II
Mr. Ronald D. Hill, EPA, MERL

ATTACHMENT NO. 6

PCB Split Sample Requirements

	10% PCB Test First DRE Test Run	40% PCB Test First DRE Test Run	Sample Quantities
Feed Oil	1 Sample	1 Sample	10 ml. per sample
Scrubber influent liquid	1 Sample		1 Liter per sample
Scrubber effluent liquid	1 Sample	1 Sample	1 Liter per sample
Incinerator ash	1 Sample	1 Sample	At least 50 gms/sample; if possible 500 gms/ samples preferred
Stack effluent	1 Sample	1 Sample	At least 2 ml. methylene chloride extract per sample

signed off by RA 4 Jan 1983

Mr. Ira Wilder
Chief, Oil and Hazardous
Materials Spills Branch
Municipal Environmental
Research Laboratory-Ci
U.S. Environmental Protection Agency
Edison, New Jersey 08837

Dear Mr. Wilder:

This letter amends my December 30, 1982 letter which transmitted to U.S. Environmental Protection Agency, Municipal Environmental Research Laboratory-Ci, Oil and Hazardous Materials Spills Branch a recodified version of the approval conditions with necessary modifications and additions for conducting a polychlorinated biphenyl trial burn of its Mobile Incinerator System.

Please add to the bottom of page 2 of Attachment No. 1 of my December 30, 1982 letter the following:

a. Calibration gases must be introduced throughtthe sampling system in the same manner as the introduction of the source gas.

We regret any inconvenience this omission may have caused you.

Sincerely yours,

Jacqueline E. Schafer
Regional Administrator

cc: Mr. Robert E. Hughey
Commissioner, NJDEP

bcc: Mr. Frank Coolick
Chief, Bureau of Engineering Review and
Permits (Hazardous Waste), NJDEP

2AWM-SW:CMASSIMINO:ch - 1/3/83 - X0545

	CONCURRENCES							
SYMBOL	2AWM-SW	2AWM-SW	2AWM-SW	2AWM-SW	2AWM-DD	2AWM	2DRA	2RA
SURNAME	C. Massimino	Brogard						
DATE	1-4-83	JAN 4 1983						

EPA Form 1320-1 (12-70)

OFFICIAL FILE COPY

Dick Dewling, 2DRA
Conrad Simon, 2AWM
Barbara Metzger, 2ES
Richard Spear, 2ES-SM
Fred Rubel 2ES-ER
Francis T. Brezenski, 2ES-TS
Kenneth S. Stoller, 2AWM-DD
Ernest A. Regna, 2AWM-SW
Catherine Massimino, 2AWM-SW
John Brogard, 2AWM-SW
Marcus Kantz, 2ES-SM
Jehuda Menczel, 2AWM-AF
Morris Trichon, 2AWM-HW

JUL 9 RECD

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF HAZARDOUS WASTE MANAGEMENT
CN 028
Trenton, N.J. 08625-0028
(609) 633-1408
Fax # (609) 633-1454

Mr. John S. Farlow, Chief
Releases Control Branch
U.S.E.P.A.
2890 Woodbridge
Building #10 (MS-104)
Edison, New Jersey 08837-3679

JUL 0 3 1990

RE: Delisting of USEPA Mobile Incineration System, EPA ID. No. NJD 980526693

Dear Mr. Farlow:

This letter responds to your letter of May 22, 1990 to Frank Coolick, Assistant Director, Hazardous Waste Regulation. Your May 22, 1990 letter requests that the New Jersey Department of Environmental Protection ("NJDEP") delist the EPA ID. No. NJD980526693. A RCRA permit for the site identified as NJD 980 526 693 was issued on March 30, 1984, after the RCRA permit application was jointly reviewed by the NJDEP and the EPA Region II. This RCRA permit was issued in order to move the USEPA mobile incineration system to the Edison Landfill (NJD980526693) in an effort to both test the incinerator and to assist in the remedial efforts at the Kin-Buc Landfill, a CERCLA site adjacent to the Edison Landfill.

The mobile incineration system was never taken to the Edison Landfill and the RCRA permit was never utilized. The mobile incineration system was instead moved to Missouri in 1984 for a field demonstration on dioxin contaminated soil. Subsequently, the mobile incineration system was disassembled and recently returned to the GSA-Raritan Depot in Edison, New Jersey.

The RCRA permit for the mobile incineration system had an effective date of May 15, 1984 and expired on January 1, 1985. In addition, there are no plans by the USEPA to renew the RCRA permit or to operate the mobile incineration system at the Edison or Kin-Buc Landfill.

On May 15, 1990, a hazardous waste facility inspection was conducted by Pete Taylor of the Bureau of Central Enforcement at the Edison Landfill. The inspection report indicates that no hazardous wastes were on-site at the Edison Landfill.

Based on the aforementioned information, the USEPA Mobile Incineration System (EPA ID No. NJD 980526693) is no longer included in the NJDEP's list of treatment, storage or disposal facilities.

JUL 03 1990

Should you have any questions, please contact Anthony Drummings of my staff at (609) 292-9880.

Very truly yours,

Thomas Sherman

Thomas Sherman, Chief
Bureau of Hazardous Waste Engineering

EP51/cfd
c: Barry Tornick, USEPA
Bob Van Fossen, BMIS
Vince Krisak, BCE

DOCUMENT: USEPA7
FOLDER: DBMMCB

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10278

DEC 21 1983

Mr. Ira Wilder
Chief, Oil and Hazardous Materials
Spills Branch
Municipal Environmental
Research Laboratory-Ci
U.S. Environmental Protection Agency
Woodbridge Avenue
Edison, New Jersey 08837

Dear Mr. Wilder:

This letter grants approval to the U.S. Environmental Protection Agency (EPA), Municipal Environmental Research Laboratory-Ci, Oil and Hazardous Materials Spills Branch (OHMSB), to dispose of liquid polychlorinated biphenyls (PCBs) using its Mobile Incineration System (the Incinerator) in EPA Region II (New Jersey, New York, Puerto Rico, and the U. S. Virgin Islands).

OHMSB requested, by its application documents dated September 21, 1981, February 26, 1982, and April 28, 1983, authorization to dispose of PCBs using the Incinerator.

Regulations governing the disposal and marking of PCBs have been promulgated by EPA pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2605(e)(1). These regulations are codified as Part 761 of Title 40 of the Code of Federal Regulations (40 CFR 761.1, et seq.). They provide that disposal of PCBs is permitted only at facilities approved by EPA.

Based upon my evaluation of OHMSB's application and supporting documents, I am hereby granting my approval to OHMSB to dispose of waste liquid PCBs in the Incinerator in EPA Region II. This approval is based upon my evaluation of trial burn results and other supporting data showing that the Incinerator meets the requirements of 40 CFR 761.70 and that operation of the Incinerator to dispose of PCB liquids will not present an unreasonable risk of injury to health or the environment.

Approval for operation of the Incinerator to dispose of PCB liquids is contingent upon OHMSB's compliance with 40 CFR 761, with the terms of its application documents, and with conditions appended to this approval letter.

Approval for the OHMSB Mobile Incineration System may be revoked, modified or altered at any time when I find evidence indicating that a violation of the conditions appended to this approval letter, 40 CFR 761, or other applicable

laws, rules or regulations has occurred. Furthermore, receipt of evidence that a misrepresentation of any material fact has been made in the application, or that all relevant facts have not been disclosed, shall constitute sufficient cause for revocation or modification of this approval.

This approval does not exempt OHMSB from any other applicable federal, State or local laws, rules or regulations.

Sincerely yours,

/s/ Jacqueline E. Schafer

Jacqueline E. Schafer
Regional Administrator

Enclosure

cc: Mr. Robert E. Hughey
Commissioner, NJDEP w/encl.

Dr. Marwan Sadat
Director, Division of Waste Management, NJDEP, w/encl.

Mr. Henry Williams
Commissioner, NYSDEC w/encl.

Mr. Norman H. Nosenchuck, P.E.
Director, Division of Solid and Hazardous Waste, NYSDEC w/encl.

Mr. Pedro A. Gelabert
Chairman
P.R. Environmental Quality Board w/encl.

Eng. Luis E. de la Cruz
Associate Member
P.R. Environmental Quality Board w/encl.

Mr. Angel LeBron
Commissioner
V.I. Department of Conservation
and Cultural Affairs w/encl.

bcc: R. T. Dewling, 2DRA w/encl.
J. Marshall, 2OEP w/encl.
C. Simon, 2AWM w/encl.
B. Metzger, 2ES w/encl.
E. A. Regna, 2AWM-SW w/encl.
R. D. Spear, 2ES-SM w/encl.
D. Sullivan, 2ES-MM w/encl.
D. Kraft, 2ES-ER w/encl.
J. N. Brogard, 2AWM-SW w/encl. ✓

APPROVAL CONDITIONS FOR DISPOSAL OF PCB LIQUIDS
IN EPA REGION II BY
EPA MOBILE INCINERATION SYSTEM

1. This approval pertains only to PCBs that are liquid at standard temperature and pressure.

2. Before beginning operation at each site, OHMSB must provide a 30-day advance notice to U.S. Environmental Protection Agency (EPA) Region II and the State and local officials where the EPA Mobile Incineration System (the Incinerator) is to be used. This notice must include at a minimum the following:

   a. Operating location:

      i. Street address

      ii. Municipality (e.g., city, town, or village)

      iii. State

   b. Starting and ending dates for operation at the site.

   Deviations are allowed from the dates designated in b. above provided EPA Region II's PCB Disposal Site Coordinator receives timely prior notice. When deviating from an established starting date, notice shall be received by EPA Region II, at the latest, during the business day preceding the start of operations. In no case shall less than 30 days' advance notice be provided to the government officials designated above.

3. No operation of the Incinerator shall commence until OHMSB has obtained all necessary approvals or permits from federal, State and local agencies.

4. In the event that OHMSB or an authorized operator of the Incinerator believes, or has reason to believe, that a release has or might have occurred, the facility operator must inform the EPA Region II Office immediately. Under no circumstances shall this report be made later than the close of business on the next regular business day.

   No PCBs may be processed in that facility until the release problem has been corrected to the satisfaction of the Regional Administrator of Region II.

5. PCB incineration shall meet the requirements of 40 CFR 761.60(a) at all times.

6. Based on analysis of each batch, at no time should the composition or character of the waste feed vary from the following:

   a. the heat value of the PCBs should be no lower that that of Aroclor 1260, namely 4.22 kcal/gm;

b. the physical form of the waste shall be a pumpable liquid;

c. the ash content shall not exceed 1.0%.

d. No waste or combination of wastes shall have a heat value of less than 14,000 BTU per pound.

7. The PCB feed rate shall not exceed an average of 26 kg/hr as Aroclor 1260, or 800,000 BTU/hr maximum total thermal input determined over the actual period of incineration of PCB material.

8. The PCB waste should be fed to the Incinerator only under the following conditions:

a. combustion air shall not be less than 1050 scfm to the kiln and 900 scfm to the secondary combustion chamber;
b. Mass transfer (MX) scrubber caustic flow must be maintained at no less than 90 gpm;
c. the pH of the MX scrubber effluent must be maintained between 8.5 to 9.0;
d. the inlet pressure to the induced draft fan must be greater than 30 inches water column;
e. combustion gas velocity shall not exceed 8000 acfm.

9. The flow of PCB to the Incinerator shall stop automatically under any of the following conditions:

a. the temperature drops below 1100°C at the exit end of the secondary combustion chamber (SCC);
b. failure of the equipment measuring temperature in the SCC;
c. failure of equipment for the monitoring of combustion products O_2, CO, and CO_2. For the purpose of this approval, monitoring operations shall be defined to include the analyzers and the transport lines;
d. excess oxygen in the SCC exhaust falls below 3%;
e. failure of the equipment that measures and records the rate and quantity of PCB feed.

10. If the automatic cut-off system is activated due to an upset condition as per Condition No. 9 above, waste incineration shall be suspended until an oral report is made, the problems causing the upset have been resolved, and the Regional Administrator, EPA Region II, has approved the resumption of incineration orally or in writing.

11. OHMSB or its authorized agents shall maintain continuous monitoring of the recorders for the temperature in the SCC, PCB feed rates and quantities, and oxygen, carbon monoxide, and carbon dioxide concentrations in the SCC. If there is any failure of these recorders, the flow of PCBs to the Incinerator shall be stopped immediately.

12. The Incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to thorough visual inspection, at least daily, for leaks, spills, fugitive emissions, and signs of tampering.

13. The emergency waste feed cutoff system and associated alarms must be tested at least weekly to verify operability.

14. The monitoring and inspection data must be recorded and the records must be placed in an operating log available at all reasonable times to EPA Region II and State inspectors.

15. Maximum emissions of HCl shall be limited to 99% removal from the gas upstream of the water scrubber, or 4 lbs/hr, whichever is greater.

16. Total particulate emissions shall not exceed State emission limits, wherever the Incinerator is operated.

17. A negative draft must be maintained as required to prevent fugitive emissions from the kiln or afterburner.

18. OHMSB and its agents must take all necessary precautionary measures to ensure that the operation of the Incinerator is in compliance with applicable safety and health standards, as required by federal, State and local regulations and ordinances. EPA/OHMSB shall be responsible for the proper training of its operators and shall submit to EPA Region II a training program within 60 days from the date of this approval.

    At a minimum, the training program must encompass:

    a. safety, operation, and maintenance procedures;

    b. procedures for using, inspecting, repairing and replacing the Incinerator's emergency and monitoring equipment; and

    c. spill prevention and clean-up plan.

    The training program to be submitted by OHMSB will be subject to EPA Region II approval. OHMSB shall implement said training program complying with all modifications required by EPA Region II.

19. If untreated PCB wastes are transported off-site, or PCB-contaminated equipment on the Incinerator is transported off-site, 40 CFR Section 761.40(b) and U.S. Department of Transportation (USDOT) requirements must be followed. Such requirements include placarding the Incinerator and labelling all PCBs.

20. All wastes generated by the Incinerator which have been found to contain 2 or more ppm of PCB's, must be disposed of in a PCB disposal facility approved by the EPA under 40 CFR Section 761.60. Analytical methods approved by EPA Region II for PCBs in different phases (water, solid, and oil) must be used by OHMSB in making such determinations [1,2].

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[1] "Test Methods for the Determination of Polychlorinated Biphenyls in Transformer Fluid and Waste Oils," EPA-600/4-81-045, USEPA Office of Research and Development, Environmental Monitoring and Support Laboratory, Cincinnati, Ohio, Sept. 1982.

[2] "Sampling Methods and Analytical Procedures Manual for PCB Disposal: Interim Report," USEPA, Feb. 10, 1978.

21. Any reports required by Condition 4 are to be made by telephone to the EPA Region II PCB Disposal Site Coordinator at (212) 264-2637 or 3407 within the time specified. In addition OHMSB shall submit all written reports to:

Chief, Solid Waste Branch
U.S. Environmental Protection Agency
Region II
26 Federal Plaza
New York, New York 10278

and

Director, Office of Pesticides and Toxic Substances
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

22. OHMSB or its agents must develop and maintain the following records:

a. the name and address of each location where PCB contaminated waste materials were processed by the Incinerator;

b. the date such service was performed;

c. the amount and type of waste material processed in the Incinerator;

d. the method of disposal and location of the disposal facility for each waste subject to disposal in accordance with the Toxic Substances Control Act (TSCA) or Resource Conservation and Recovery Act (RCRA) rules and regulations;

e. a summary of the total quantity of each type of waste material processed in the Incinerator during the previous calendar year.

The records must be compiled within 60 days of the servicing date, must be kept at one centralized location, and must be available for inspection by authorized representatives of EPA Region II. Such records shall be maintained for at least five years. OHMSB or its agents must also maintain the records required by 40 CFR Section 761.180(f). These records or their copies must be submitted to EPA Region II upon request. In addition, they must be submitted to EPA Region II within 60 days of termination, if OHMSB or its authorized agents terminate their operation of the Incinerator.

23. All instruments shall be calibrated in accordance with either EPA Region II protocol or the manufacturers' specifications, whichever may apply. Calibration dates and data will be included as part of the record-keeping required for the Incinerator, and shall be available for inspection by representatives of EPA Region II.

24. OHMSB must develop and submit to EPA Region II a closure plan for terminating use of the Incinerator within 90 days from the date of this approval. This plan shall include provisions for the decontamination and disposal of PCB contaminated equipment or process materials. OHMSB shall implement said plan complying with all modifications required by EPA Region II.

25. OHMSB must submit a written report to EPA Region II within 30 days from the date of manufacture of each additional Mobile Incineration unit which is to be operated in Region II. This report should contain the following information:

    a. date of manufacture of the unit;

    b. identification and/or serial number of the new Mobile Incineration unit;

    c. certification by an independent, licensed professional engineer[3] to the effect that the mobile incineration unit is substantially identical to the original unit in terms of engineering design, hardware, process capacity, and quality of workmanship;

    d. endorsement by the Assistant Administrator of the EPA Office of Research and Development signifying that construction of the unit has been completed in the manner described above; and

    e. a list of all nonsubstantive changes made to the design and construction of the new mobile incineration unit that cause it to be different from the original Mobile Incineration System.

26. No major modifications may be made to the design of the Incinerator and its monitoring systems operated in EPA Region II without written approval of the Regional Administrator. For the purposes of this approval, "major modification" shall be defined as any change to process capacity, design, efficiency, waste type or any other changes affecting overall environmental impact.

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[3] With a valid license issued by a State of the United States of America.

USEPA Mobile Incinerator

Table D-1

SUMMARY OF TRIAL BURN RESULTS

TEST	FEED MATERIAL	FEED RATE (lb/hr)	PARTICULATE EMISSION[A] (mg/m^3)	HCl REMOVAL[B] (%)	COMBUSTION EFFICIENCY[C] (%)	DESTRUCTION EFFICIENCY[D] (%)	SCC DWELL TIME[E] (Sec)
1	diesel fuel	192	15.1	NA	>99.999	NA	2.1
2	1.2% iron oxide/ diesel fuel	195	24.6	NA	>99.999	NA	2.0
3	21.4% CCl_4/28.9% ODCB/diesel fuel	313	50.7	99.95	>99.999	>99.999	1.9
4	11.4% PCB/ diesel fuel	198	39.3	99.98	>99.999	>99.9998	2.5
5	39.3% PCB/ diesel fuel	208	46.8	99.99	>99.999	>99.9999	2.3

NOTE: All results averaged from a minimum of 3 test runs
NA-Not applicable
A- dry catch corrected to 50% excess air: requirement $< 180\ mg/m^3$
B- (HCl in - HCl out)/ HCl in: requirement $> 99\%$
C- (CO_2 - CO)/ CO_2: requirement $> 99.9\%$
D- (Organic in - Organic out)/ Organic in: requirement for CCl_4 & ODCB $> 99.99\%$
E- based on material balance calculations

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
26 FEDERAL PLAZA
NEW YORK, NEW YORK 10278

6 JUL 1982

John B.
Current PCB
activity file please.
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Mr. Ira Wilder
Chief, Oil and Hazardous Materials
Spills Branch
Municipal Environmental
Research Laboratory-Ci
U.S. Environmental Protection Agency
Edison, New Jersey 08817

Dear Mr. Wilder:

This letter grants approval to the U.S. Environmental Protection Agency (EPA), Municipal Environmental Research Laboratory-Ci, Oil and Hazardous Materials Spills Branch (OHMSB) to conduct a trial burn of its Mobile Incineration System for the disposal of polychlorinated biphenyls (PCBs) at its Edison, New Jersey facility.

Regulations governing the disposal and marking of PCBs were promulgated by EPA on February 17, 1978 and revised on May 31, 1979. These revised regulations are published beginning at page 31514 of the Federal Register of May 31, 1979 (44 FR 31514), and are codified as Part 761 of Title 40 of the Code of Federal Regulations (40 CFR Section 761.10 et seq.). The regulations promulgated pursuant to Section 6(e)(1) of the Toxic Substances Control Act (TSCA), 15 U.S.C. Section 2605(e)(1), provide that disposal of PCBs is permitted only at facilities approved by the Regional Administrator of the EPA Region in which the facility is located.

OHMSB has requested, by its PCB Disposal Application dated September 21, 1981 and Supplement 1 (Trial Burn Plan) dated February 26, 1982, authorization to dispose of PCBs in their Mobile Incineration System located at the EPA Region II facility at Edison, New Jersey.

Based upon my evaluation of OHMSB's application and supporting documentation, I am hereby granting my approval to allow OHMSB to conduct a trial burn of PCBs in their Mobile Incineration System at the EPA Region II facility located at Edison, New Jersey. This approval is based upon my evaluation that a trial burn is necessary to generate supporting data to show that the Mobile Incineration System meets the requirements of 40 CFR Section 761.40 and that the trial burn will not present an unreasonable risk of injury to health or the environment from PCBs.

Approval for the EPA-OHMSB Mobile Incineration System PCB trial burn is contingent on OHMSB's compliance with their submitted trial burn plan in addition to the conditions appended to this approval letter.

Approval for the U.S. EPA Mobile Incineration System may be revoked, modified or otherwise altered at any time when I find that evidence indicates that a violation of the conditions appended to this approval letter, or of 40 CFR Part 761 or other applicable rules and regulations has occurred. Furthermore, receipt of evidence that a misrepresentation of any material fact has been made in the application, or that all relevant facts have not been disclosed, shall constitute sufficient cause for revocation or modification of this approval.

This approval does not exempt OHMSB from any other appropriate federal, State and local laws, rules and regulations.

Sincerely yours,

/s/ Jacqueline E. Schafer

Jacqueline E. Schafer
Regional Administrator

Enclosure

cc: Mr. Robert E. Hughey
Commissioner, NJDEP w/encl.

Mr. Lino F. Pereira
Director, Solid Waste Administration, NJDEP w/encl.

Mr. Robert F. Flacke
Commissioner, NYSDEC w/encl.

Mr. Norman H. Nosenchuck, P.E.
Director, Division of Solid Waste, NYSDEC w/encl.

Mr. Darlan Brin
Commissioner
V.I. Department of Conservation
and Cultural Affairs w/encl.

Mr. Pedro A. Gelabert
Chairman
P.R. Environmental Quality Board w/encl.

Ing. Luis E. de la Cruz
Director, Solid, Toxic and
Hazardous Waste Program
P.R. Environmental Quality Board w/encl.

bcc: R. Dewling, 2RA w/encl.
K. Stoller, 2AWM w/encl.
W. Mugdan, 2ENF-GE w/encl.
E. Regna, 2AWM-SW w/encl.
G. Smith, 2AWM-SW w/encl.
C. Massimino, 2AWM-SW w/encl.
J. Brogard, 2AWM-SW w/encl.

APPROVAL CONDITIONS FOR TRIAL BURNS
EPA MOBILE INCINERATION SYSTEM
EDISON, NEW JERSEY

1. The applicant is authorized to conduct trial burns of polychlorinated biphenyls (PCBs) at intermittent times over the duration of three months.

2. Extension of the three-month period designated in Condition No. 1 may be granted provided the applicant requests such extension in writing from the Regional Administrator (RA), EPA Region II with adequate justification. The applicant must receive the RA's written approval prior to continuing the PCB trial burn beyond the three-month period.

3. The commencement date for the three-month period shall be specified by the applicant in writing to EPA Region II, the State of New Jersey and the County of Middlesex and the Township of Edison at least 30 days prior to commencing the burning of PCBs.

4. No more than four 16-hour tests shall be conducted. PCBs will not be introduced into the combustion chamber until steady-state operating conditions exist within the incinerator. The total combustion time during each PCB test burn shall not exceed 16 hours from start-up to shut-down.

5. The flow of PCBs to the incinerator shall stop automatically if:

   a. oxygen concentration in the secondary combustion chamber (SCC) falls below three percent

   b. any failure of monitoring operations occurs

   c. there is any failure of the equipment measuring PCB feed rates and quantities

   d. combustion temperature in the SCC falls below 2060°F

6. If the automatic cut-off system is activated, due to an upset condition as per 40 CFR 761.40(a)(5) and (8) testing shall be suspended until an oral report is made; the conditions causing the upset have been rectified; and the RA, EPA Region II has approved continuation of the trial burn, orally or in writing.

7. The amount of Askarel used in the trial burns shall not exceed 1100 lbs.

8. The applicant shall comply with Items Nos. 1, 3, 6, 7 and 10 of the May 12, 1982 memorandum from Ira Wilder (OHMSB), MERL-Ci to Richard T. Dewling, Deputy Regional Administrator (DRA), EPA Region II.

9. The applicant shall comply with Items Nos. 1, 2, 3, and 4 of the June 11, 1982 memorandum from Ira Wilder (OHMSB), MERL-Ci to Richard T. Dewling, DRA, EPA Region II.

10. All monitoring instruments shall be calibrated to the manufacturer's specifications. The data generated from the three-point calibration, two point calibration and single-point calibration testing of the continuous emission monitors during burning of diesel fuel shall be submitted to EPA Region II for determination of acceptability. The applicant must receive written acceptance of this data from EPA Region II prior to conducting trial burns of PCBs.

11. The applicant shall make arrangements with EPA Region II for splitting samples obtained by the applicant during the PCB trial burns. EPA Region II shall provide the applicant notice at least two weeks prior to the PCB trial burn designating the specific split samples required.

12. The applicant shall submit a copy of the mobile incinerator spill prevention, control and countermeasure plan and emergency contingency plan to EPA Region II. The applicant must receive written acceptance of these documents from EPA Region II prior to conducting trial burns of PCBs.

13. All written reports shall be sent to:

Garrett A. Smith
Chief, Hazardous Waste Program Support Section
U.S. Environmental Protection Agency
26 Federal Plaza
New York, New York 10278

All oral reports shall be made to:

Fred Rubel
Chief, Emergency Response and
Hazardous Materials Inspection Branch
U.S. Environmental Protection Agency
Edison, New Jersey 08817
(201) 548-8730